

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION**

JUDITH A. HENDRIAN, Individually and
as Personal Representative of the Estate of
HOWARD G. HENDRIAN, Deceased,

Case No. 08-CV-14371

Hon. Julian Abele Cook

Plaintiff,

v

SAFETY-KLEEN SYSTEMS, INC.,

Defendant.

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**DEFENDANT SAFETY-KLEEN SYSTEMS, INC.’S
MOTION *IN LIMINE* TO PRECLUDE THE TESTIMONY, OPINIONS AND
REPORT OF MELVYN KOPSTEIN, Ph.D.**

DEFENDANT SAFETY-KLEEN SYSTEMS, INC. (hereinafter “Defendant” or “Safety-Kleen”), by and through its counsel, Clark Hill, PLC and Jones Carr M^cGoldrick, LLP, moves *in limine*, pursuant to Fed. R. Evid. 104, 401, 402, 403, 702 and 703, to exclude the testimony, opinions and report of Plaintiff’s expert witness Melvyn Kopstein, Ph.D. (“Kopstein”), on the grounds that the opinion evidence proffered by Kopstein concerning Howard G. Hendrian’s alleged exposure to Safety-Kleen’s 105 Solvent, an organic, mineral-spirits-based solvent,

as well as Safety-Kleen's product warnings and analytical testing method, is flawed and unsupported by accepted methodologies, scientifically invalid, and precluded under *Daubert*, its progeny and the Federal Rules of Evidence. As such, Kopstein's opinions are inadmissible and Defendant requests that this Honorable Court exclude the testimony, opinions and report of Kopstein, as well as any and all references to such materials at the trial of this matter.

In support of this Motion, Defendant will respectfully show the Court as follows:

1. Plaintiff Judith Hendrian ("Plaintiff") claims benzene exposure from occupational use of Safety-Kleen 105 Solvent ("SK 105") at Ford's facilities in Livonia, Michigan, caused Decedent Howard Hendrian ("Hendrian") to develop myelodysplastic syndrome ("MDS") and other related leukemic complications, including acute myelogenous leukemia ("AML").

2. Plaintiff designated Melvyn Kopstein to opine as to (1) the alleged benzene content of SK 105; (2) Hendrian's alleged inhalation exposures to benzene from alleged use of SK 105; (3) the adequacy of Safety-Kleen's warnings, instructions and labels provided with the solvent; (4) the "scientific merit" of Safety-Kleen's Method 9211; and (5) Safety-Kleen's compliance with Ford's requirements for product information.

3. In offering his opinions about the benzene content of SK 105, Kopstein ignores all relevant real-world benzene testing of SK 105 and instead substitutes

outdated and irrelevant data related to other products. He selectively decided which data to consider for benzene content and, in so doing, completely ignored a proper application of the scientific method. Kopstein relies on outdated literature related to a broad category of mineral spirits—and, notably, not a single reference to SK 105. Moreover, Kopstein’s sources do not disclose the analytical methods used and as such cannot be appropriately verified. Without such information, even according to Kopstein’s own recognized standards applicable to analytical methods, the accuracy of the benzene content estimates Kopstein provides cannot be determined.

4. In calculating Hendrian’s alleged benzene exposures, Kopstein uses a flawed exposure model and fails to validate his findings by comparison to any other data. Kopstein’s “methodology” ignores all available empirical exposure data specific to the machine and solvent at issue. Kopstein’s “methodology” is the application of an oversimplified and arbitrary ratio between benzene in hydrocarbon solutions and airborne emissions as reported in a single exposure simulation, without consideration of the many factors necessary in calculating past benzene exposures in specific circumstances. Moreover, air monitoring is presently the only method accepted by OSHA, NIOSH or the ACGIH for determination of employee exposures and then evaluating and comparing those exposures with occupation health standards. In forming his opinion here, Kopstein broke with reliable and relevant scientific practices and ignored numerous air monitoring studies regarding

the sink-on-a-drum parts washer at issue and SK 105.

5. Kopstein's *ipse dixit* has been previously excluded because his unreliable exposure assessment lacks either validation or general acceptance in the scientific community. Another court, applying *Daubert*, rebuffed Kopstein's attempts at "self-acclamation" of his own methodologies, noting that "nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert." Specifically, the Court took issue with the assumptions Kopstein made, the data he relied upon in applying his "textbook models" to the facts of the case, and his "intermingling of well-established formulae in order to reach a particular conclusion." Moreover, the Court found no indication in the record that Kopstein's approach of applying his "formula or combination of formulae" was in fact followed by other experts in the industry; nor were there any references to articles or papers that validated his approach of applying the formula to the exposures at issue in that particular case.

6. Kopstein is not qualified to offer opinions on Safety-Kleen's analytical testing method or the contents of its warnings and labels. Nothing in Kopstein's education, experience or background qualifies him to offer expert testimony regarding *analytical chemistry* testing methods. Kopstein describes himself as a "forensic chemical engineer." His degree is simply in chemical engineering and the entirety of his work experience, prior to becoming a professional expert

witness, is limited solely to chemical engineering. Similarly, he has no qualifications or skills to offer opinions on Safety-Kleen's Material Safety Data Sheets and warning labels. Kopstein has never created, nor has it ever been his job to create, a MSDS or warning label for any product or material. And, he admits that he is neither an expert in industrial hygiene nor human factors.

7. Kopstein's allegations regarding materials submitted to Ford are based solely upon speculation and conjecture. He claims Safety-Kleen violated Ford policies regarding product information, alleging that Safety-Kleen failed to disclose the presence of benzene in SK 105 during Ford's product approval process. However, Kopstein admits he doesn't know what information may have been provided to Ford. Despite requests for the information, Ford was unable to produce the materials Safety-Kleen submitted when SK 105 was approved for use so the record is silent on this issue. As such, Kopstein's opinions on this issue are pure speculation.

WHEREFORE, Safety-Kleen Systems, Inc. respectfully requests that this Honorable Court grant its Motion *in limine* and preclude any testimony, opinions and report of Kopstein, as well as any and all references to such materials at the trial of this matter.

CERTIFICATE OF CONFERENCE

I hereby certify that, pursuant to E.D. Mich. L.R. 7.1(a)(1), there was a conference between counsel for the parties during which the movant explained the nature of the motion and its legal basis and requested, but did not obtain, concurrence in the relief sought.

Respectfully submitted,

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Date: October 28, 2013

**UNITED STATES DISTRICT COURT
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**DEFENDANT SAFETY-KLEEN SYSTEMS, INC.'S BRIEF IN SUPPORT OF
ITS MOTION *IN LIMINE* TO PRECLUDE THE TESTIMONY, OPINIONS
AND REPORT OF MELVYN KOPSTEIN, Ph.D.**

STATEMENT OF THE ISSUES PRESENTED

- I. Whether the testimony, opinions and report of Melvyn Kopstein, Ph.D., regarding Safety-Kleen's analytical testing methods and its product warnings require preclusion because Kopstein lacks the appropriate education, experience, training, and specialized knowledge relevant to those topics to support his opinions under Fed. R. Evid. 702, *Daubert* and its progeny?
- II. Whether the testimony, opinions and report of Melvyn Kopstein, Ph.D. pertaining to the alleged benzene content of the 105 Solvent require preclusion as they ignore all real-world testing data regarding the solvent and are based upon outdated and irrelevant data related to other products?
- III. Whether the testimony, opinions and report of Melvyn Kopstein, Ph.D. pertaining to Hendrian's alleged benzene exposures require preclusion as they are based upon a flawed methodology not validated by science, ignore all real-world testing data regarding the solvent and parts-washing machine at issue, and amount to nothing more than *ipse dixit* of the expert?
- IV. Whether the testimony, opinions and report of Melvyn Kopstein, Ph.D. pertaining to Safety-Kleen's alleged failure to comply with Ford policies regarding product information require preclusion because they are based on pure speculation and conjecture and do not aid the jury in any fact determination?

CONTROLLING AUTHORITY

Pursuant to E.D. Mich. L.R. 7.1(d)(2), the following is the controlling or most appropriate authority for the relief sought by Defendant:

Rules

1. Fed. R. Evid. 104
2. Fed. R. Evid. 401
3. Fed. R. Evid. 402
4. Fed. R. Evid. 403
5. Fed. R. Evid. 702
6. Fed. R. Evid. 703

Cases

1. *Daubert v. Merrill Dow Pharmaceuticals*, 509 U.S. 579 (1993)
2. *Pluck v. BP Oil Pipeline Co.*, 640 F.3d 671 (6th Cir. 2011)
3. *Sterling v. Velsicol Chem. Corp.*, 855 F.2d 1188 (6th Cir. 1988)
4. *Bonner v. ISP Techs. Inc.*, 259 F.3d 924 (8th Cir. 2001)
5. *Kelley v. American Heyer-Schulte Corp.*, 957 F. Supp. 873 (W.D. Tex. 1997)
6. *Baker v. Chevron*, 680 F. Supp. 2d 865 (S.D. Ohio 2010)
7. *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137 (1999)
8. *Thomas v. City of Chattanooga*, 398 F.3d 426, 432 (6th Cir. 2005)
9. *United States v. Bonds*, 12 F.3d 540, 555 (6th Cir. 1993)
10. *Greenwell v. Boatwright*, 184 F.3d 492, 496 (6th Cir. 1999)
11. *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717 (3d Cir. 1994)
12. *Joy v. Bell Helicopter Textron, Inc.*, 999 F.2d 549 (D.C. Cir. 1993)
13. *Smelser v. Norfolk S. R.R. Co.*, 105 F.3d 299 (6th Cir. 1997), *cert. denied*, 522 U.S. 817 (1997)
14. *Berry v. Crown Equip. Corp.*, 108 F. Supp. 2d 743 (E.D. Mich. 2000)
15. *Cicero v. Borg-Warner Auto, Inc.*, 163 F. Supp. 2d 743 (E.D. Mich. 2001)
16. *Johnson v. Manitowoc Boom Trucks, Inc.*, 484 F.3d 426 (6th Cir. 2007)

17. *Mike's Train House, Inc. v. Lionel, L.L.C.*, 472 F.3d 398 (6th Cir. 2006).
18. *Mohney v. USA Hockey, Inc.*, 138 Fed.Appx. 804 (6th Cir. 2005)
19. *Lippe v. Bairnco*, 288 B.R. 678 (S.D.N.Y. 2003)
20. *In re Rezulin Prods. Liab. Litig.*, 309 F. Supp. 2d 531 (S.D.N.Y. 2004)
21. *In re Propulsid Products Liability Litigation*, 261 F. Supp. 2d 603 (E.D. La. 2003)
22. *Nelson v. Tennessee Gas Pipeline*, No. 95-1112, 1998 WL 1297690 at *7 (W.D. Tenn. Aug. 31, 1998), *aff'd* 243 F.3d 244 (6th Cir. 2001)
23. *Downs v. Perstorp Components, Inc.*, 126 F. Supp. 2d 1090 (E.D. Tenn. 1999)
24. *General Electric Co. v. Joiner*, 522 U.S. 136 (1997)
25. *Moore v. Ashland Chem., Inc.*, 151 F.3d 269 (5th Cir. 1998)
26. *Attorney General of Okla. v. Tyson Foods, Inc.*, 565 F.3d 769 (10th Cir. 2009)
27. *Meemic Ins. Co. v. Hewlett-Packard Co.*, 717 F. Supp. 2d 752 (E.D. Mich. 2010)
28. *Clay v. Ford Motor Co.*, 215 F.3d 663 (6th Cir. 2000)
29. *Castellow v. Chevron USA*, 97 F. Supp. 2d 780 (S.D. Tex. 2000)
30. *Edwards v. Safety-Kleen Corp.*, 61 F. Supp. 2d 1354 (S.D. Fla. 1999)
31. *Firestone v. Fla. Power & Light Co.*, 272 Fed. Appx. 761 (11th Cir. 2008)
32. *Allen v. Pa. Eng'g Corp.*, 102 F.3d 194 (5th Cir. 1996)
33. *Freeport-McMoran Res. Partners Ltd. P'ship*, 56 F. Supp. 2d 823 (E.D. Mich. 1999)
34. *McLean v. 988011 Ontario, Ltd.*, 224 F.3d 797 (6th Cir. 2000)

Regulations

1. 29 CFR § 1910.1200

MATTER BEFORE THE COURT

Plaintiff Judith Hendrian (“Plaintiff”) alleges that Howard “Gary” Hendrian’s (“Hendrian”) workplace exposure to Defendant’s organic parts-washing solvent caused the development of his myelodysplastic syndrome and other leukemic complications (“MDS-leukemia”) and subsequent death. In an effort to satisfy her burden of proof that Safety-Kleen’s 105 Solvent (“SK 105”) specifically caused Hendrian’s disease process, Plaintiff proffers the expert testimony of Melvyn Kopstein, Ph.D. (“Kopstein”), who opines regarding the alleged benzene content of the solvent, purports to quantify Hendrian’s alleged exposure thereto, and postulates regarding Safety-Kleen’s product warnings and analytical testing methods. Because Kopstein is unqualified to offer a number of his opinions, and because his opinions are the result of a deeply flawed, unvalidated methodology or are based upon pure speculation, Safety-Kleen moves *in limine* to exclude his testimony, opinions and report under *Daubert*, its progeny and the Federal Rules of Evidence.

FACTUAL BACKGROUND

A. PLAINTIFF’S ALLEGATIONS

Plaintiff seeks damages from Safety-Kleen in connection with her late husband’s alleged development of MDS-leukemia and subsequent death as a result of his claimed exposure to SK 105, an organic, mineral-spirits-based parts washing

solvent.¹ Hendrian served as a senior technician in the New Product Center (“ATNPC”) of Ford’s Automatic Transmission Plant in Livonia, Michigan, where he worked in the Flexible Machining Systems (“FMS”) department beginning in May 1991.² Plaintiff claims that Hendrian used SK 105 in a parts washing device provided by Safety-Kleen during his tenure in the FMS Department, and that he developed MDS-leukemia as a result of his occupational exposure to benzene allegedly present in SK 105.³

B. SAFETY-KLEEN 105 SOLVENT

SK 105 is an organic, parts-washing solvent primarily comprised of a refined petroleum distillate, commonly referred to as mineral spirits or Stoddard solvent, which Safety-Kleen historically acquired from major petroleum refiners.⁴ SK 105 is delivered to industrial customers for use in degreasing or parts washing operations, typically with a parts-washing device. Used, or “spent,” solvent is periodically collected, recycled through Safety-Kleen’s distillation process and ultimately redistributed.⁵

Mineral spirits, such as SK 105, contain various hydrocarbon components,

¹ See Plaintiff’s Complaint, on file herein (Doc. No. 1-3); *see also, e.g.*, July 12, 2011 Report of Nachman Brautbar, M.D. (hereinafter “Brautbar Report”) at 64, on file herein (Doc. No. 18-1).

² See Nov. 15, 2012 Report of Melvyn Kopstein, Ph.D., attached hereto as Exhibit A, at ¶¶ 25.

³ *See, e.g.*, Brautbar Report at 64. Plaintiff seeks recovery against Safety-Kleen on theories of negligence and products strict liability. Although Plaintiff styles her claim as one under “strict liability,” the Court construed her claim as one sounding in products liability in a previous Order (Doc. No. 57). Each of Plaintiff’s causes of action is founded upon Safety-Kleen’s alleged failure to adequately warn Hendrian of the purported risks of organic solvent exposure. *See* Plaintiff’s Complaint at ¶¶ 17-19, 24 and 28-29. Safety-Kleen denies Plaintiff’s claims.

⁴ *See* May 20, 2011 Report of James Breece, Ph.D., attached hereto as Exhibit B, at 3; *see also* Ex. A at 7-8.

⁵ *See* Ex. B at 3-4.

of which benzene may be a naturally-occurring, trace contaminant.⁶ Occupational Safety and Health (“OSHA”) regulations identify benzene as a potential air contaminant and set forth both labeling standards and exposure limits for benzene.⁷ Notably, mineral spirits have been extensively studied and no industry or governmental organization has identified them as a carcinogen.⁸ As with any petroleum distillate, there can be substantial differences in chemical composition of various mineral spirits or Stoddard solvents.⁹

Safety-Kleen actively sought to verify that the benzene content of SK 105, if any, remained well within applicable regulatory limits – initially through testing by outside laboratories and later by internal testing at a state-of-the-art facility using a testing methodology that Safety-Kleen developed.¹⁰ That methodology, SK Method 9211, was based upon an EPA standard testing method and was used to determine the benzene content of solvent that Safety-Kleen obtained from vendors,

⁶ See May 18, 2011 Report of John Spencer, attached hereto as Exhibit C, at 3; Ex. B at 11.

⁷ See Ex. C at 4. Specifically, OSHA’s Hazard Communication Standard (“HazCom”) requires that benzene be listed on a product’s Material Safety Data Sheet (“MSDS”) if the product contains 0.1% (or 1,000 ppm) or more benzene or if it is likely to be released into the workplace at concentrations that would exceed occupational exposure standards or present a health hazard at those concentrations. 29 CFR § 1910.1200(g)(2)(i)(C)(2). OSHA concluded that 1,000 ppm is the appropriate action level because it gives “a high degree of confidence” that resulting airborne concentrations would be below the airborne action level. See, Ex. C at 4-5.

⁸ See Ex. C at 3; see also Ex. B at 12.

⁹ See, e.g., Agency for Toxic Substances and Disease Registry, *Toxicological Profile for Stoddard Solvent*, June 1995, attached as Exhibit D (pertinent sections only). Stoddard solvent is a “mixture of chemicals,” *Id.* at p. 2, and can contain different hydrocarbons, such as benzene, in different amounts. *Id.* at Table 3-3, p. 84. See also, International Agency for Research on Cancer (IARC): Some organic solvents, resin monomers and related compounds, pigments, and occupational exposures in paint manufacture and painting. IARC Monographs on the Evaluation of Carcinogenic Risk of Chemicals to Humans, Vol. 47. Lyon, France: IARC 1989, attached as Exhibit E (relevant portions only).

¹⁰ See May 18, 2011 Report of Anne O’Donnell, attached hereto as Exhibit F, at 2. Solvent obtained from vendors was known as “virgin” solvent. Solvent processed after customer use was known as “recycled” solvent. *Id.*

as well as the solvent it recycled.¹¹

Numerous published and unpublished studies assess benzene emissions from Safety-Kleen parts washers using SK 105, including NIOSH Health Hazard Evaluations (“HHEs”), the Fedoruk simulation referenced by Kopstein, and testing conducted both internally and by third-parties at Safety-Kleen’s request, among others.¹² In many cases, benzene was not even detected in personal breathing zone samples. In other studies, the solvent was spiked with pure benzene to evaluate worst-case scenarios, and, overall, the results of these studies, including the spiked solvent studies, indicated that personal exposures to benzene associated with the use of SK 105 under normal conditions were well below OSHA limits.¹³

C. KOPSTEIN’S OPINIONS

Kopstein opines as to (1) the alleged benzene content of SK 105; (2) Hendrian’s alleged inhalation exposures to benzene from alleged use of SK 105; (3) the adequacy of Safety-Kleen’s warnings, instructions and labels provided with the solvent; (4) the “scientific merit” of Safety-Kleen’s Method 9211; and (5)

¹¹ *Id.* In 1991 - during the time frame of Hendrian’s alleged exposure - Safety-Kleen’s Technical Center commenced a comprehensive survey of both virgin and recycled SK 105 and collected samples of every product delivery at all Safety-Kleen branches and recycle centers across the country for the next two (2) years. During that same period, recycle centers sent weekly composite samples of all recycled 105 Solvent batches for testing, as well. *Id.* From over 1,500 samples analyzed, the average benzene content was determined to be 20 mg/L for virgin SK 105 and 27 mg/L for recycled SK 105. *Id.* For comparison purposes, benzene units in mg/L are substantially equivalent to units in parts per million (or “ppm”), given the molecular density of the liquids at issue. Relevant to the instant case, the SK 105 provided to Ford’s ATNPC facility was recycled at Safety-Kleen’s Recycle Center in Dolton, Illinois, and showed an average benzene content of 15.7 ppm to 19 ppm, depending on the timeframe at issue. *See* Ex. B at 3; *see also* Ex. F at 2; *see also* Ex. C at 3. Importantly, this is approximately 1/50th of the 1,000 ppm OSHA HazCom requires to be present in a solution like SK 105 for benzene warnings to be placed on a MSDS. *See* Ex. B at 12.

¹² *See* Ex. C at 6-7. These studies are all set forth in detail on pages 6 through 10 of Mr. Spencer’s report.

¹³ *See* Ex. C at 6-10.

Safety-Kleen's compliance with Ford's requirements for product information.¹⁴

Kopstein lacks practical experience in hazard communication and analytical chemistry - topics about which he proposes to testify. His opinions regarding the benzene content of SK 105 are based solely upon data from a single 1975 study of an unknown Stoddard solvent, rather than the specific solvent at issue, SK 105. Kopstein's opinions contradict his previous testimony and, in "calculating" Hendrian's alleged benzene exposure from SK 105, Kopstein employs an unreliable methodology without making any effort to verify his results with other data. Finally, his opinions pertaining to Ford's chemical information requirements are based upon sheer speculation. As such, Safety-Kleen respectfully requests that his report, testimony and the opinions contained therein be excluded from this case, pursuant to Federal Rule of Evidence 702 and *Daubert v. Merrill Dow Pharmaceuticals*, 509 U.S. 579 (1993) and its progeny.

LAW AND ARGUMENT

I. LEGAL FRAMEWORK FOR PLAINTIFF'S EXPERT OPINIONS

A. Plaintiff's experts must establish both general and specific causation.

In a toxic tort case, the plaintiff must establish both general and specific causation through proof that the alleged toxic substance is capable of causing, and did in fact cause, the plaintiff's alleged injury. *Pluck v. BP Oil Pipeline Co.*, 640

¹⁴ See Ex. A at 2.

F.3d 671, 677 (6th Cir. 2011); *Sterling v. Velsicol Chem. Corp.*, 855 F.2d 1188 (6th Cir. 1988); *Bonner v. ISP Techs. Inc.*, 259 F.3d 924, 928 (8th Cir. 2001). As to specific causation, the plaintiff must show exposure to the toxic substance and that the level of exposure was sufficient to induce the complained-of medical condition - this is commonly called a “dose-response relationship.” *Pluck*, 640 F.3d at 677; *see also Kelley v. American Heyer-Schulte Corp.*, 957 F. Supp. 873, 875 (W.D. Tex. 1997). Both causation inquiries involve scientific assessments that must be established through expert testimony. *Pluck*, 640 F.3d at 677; *Baker v. Chevron*, 680 F.Supp.2d 865, 874 (S.D. Ohio 2010).¹⁵

Thus, Plaintiff must show that (1) exposure to SK 105 was capable of causing MDS-leukemia in general and (2) that Hendrian’s exposure to SK 105 specifically caused his MDS-leukemia. *Id.* Kopstein purports to calculate Hendrian’s exposure as part of Plaintiff’s causation analysis. For the reasons set forth herein, Kopstein’s opinions must be excluded.

B. A trial court’s gatekeeping duty under Fed. R. Evid. 702.

The United States Supreme Court charged trial courts to act as “gatekeepers,” explaining that Federal Rule of Evidence 702 “clearly contemplates some degree of regulation of the subjects and theories about which an expert may

¹⁵ “Scientific knowledge of the harmful level of exposure to [an agent], plus knowledge that the plaintiff was exposed to such quantities, are minimal facts necessary to sustain the plaintiff’s burden in a toxic tort case.” *Cano v. Everest Minerals Corp.*, 362 F. Supp. 2d 814, 837 (W.D. Tex., 2005), quoting *Allen v. Pennsylvania Engineering Corp.*, 102 F.3d 194, 199 (5th Cir. 1996); *see also McClain v. Metabolife Internat’l, Inc.*, 401 F.3d 1233, 1241 (11th Cir. 2005). Without this testimony, “a plaintiff’s toxic tort claim will fail.” *Pluck*, 640 F.3d at 677; *Baker*, 680 F.Supp.2d at 874.

testify.” *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 589 (1993). In light of Rule 702’s mandate, expert scientific evidence must be both “reliable” and “relevant.” *Id.*; *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 147 (1999).

Daubert and its progeny require the party proffering the evidence to establish the testimony’s “evidentiary reliability” or trustworthiness. *See Daubert*, 509 U.S. at 592 n. 10.¹⁶ In other words, “[t]he trial court’s gatekeeping function requires more than simply ‘taking the expert’s word for it.’” *Thomas v. City of Chattanooga*, 398 F.3d 426, 432 (6th Cir. 2005).

Relevance requires an appropriate “fit” and scientific testimony is only relevant if the expert’s “reasoning or methodology properly can be applied to the facts in issue.” *Daubert*, 509 U.S. at 591, 593; *United States v. Bonds*, 12 F.3d 540, 555 (6th Cir. 1993); *see also Greenwell v. Boatwright*, 184 F.3d 492, 496 (6th Cir. 1999). The inquiry focuses “solely on principles and methodology, not on the conclusions that they generate.” *Daubert*, 509 U.S. at 595. “Any step that renders the analysis unreliable... renders the expert’s testimony inadmissible.” *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 745 (3d Cir. 1994). “This is true whether the step completely changes a reliable methodology or merely misapplies that methodology.” *Id.* Thus, courts must “resist the temptation to answer objections to receipt of expert testimony with the shorthand remark that the jury will give it

¹⁶ The well-known *Daubert* factors include: (1) whether the scientific theory or technique can be (and has been) tested; (2) whether the theory or technique has been subjected to peer review and publication; (3) whether there is a known or potential error rate; and (4) whether the theory or technique is generally accepted within the relevant scientific community. *Daubert*, 509 U.S. at 592-94.

the weight it deserves.” *Joy v. Bell Helicopter Textron, Inc.*, 999 F.2d 549, 569 (D.C. Cir. 1993).

II. KOPSTEIN’S OPINIONS ARE UNRELIABLE AND SHOULD BE EXCLUDED UNDER *DAUBERT* AND THE FEDERAL RULES OF EVIDENCE

A. Kopstein is not qualified to offer opinions on Defendant’s analytical testing method or the contents of its warnings and labels.

Kopstein begins his “analysis” by attacking Safety-Kleen’s analytical method, Method 9211, in a blatant attempt to discount the results of Defendant’s analytical benzene testing. Kopstein opines, in part, that Safety-Kleen’s Method 9211 lacks scientific merit because it is an unpublished and non-peer-reviewed testing method that has purportedly not undergone inter-laboratory testing and is not based upon EPA testing methods.¹⁷ He also claims – incorrectly – that Method 9211 does not utilize a pure standard or use a mixture obtained from mixing pure standards in known amounts and thus did not involve valid calibration.¹⁸ Ultimately, he insinuates Safety-Kleen is guilty of laboratory fraud.¹⁹

Nothing in Kopstein’s education, experience or background qualifies him to offer expert testimony regarding analytical chemistry testing methods. In order to satisfy the threshold requirement of Rule 702, a proffered expert witness must demonstrate expertise in the particular subject about which he proposes to testify. *Smelser v. Norfolk S. R.R. Co.*, 105 F.3d 299, 303 (6th Cir. 1997), *cert. denied*, 522

¹⁷ See Ex. A at ¶ 92; see also Melvyn Kopstein Dep. 89:12-17, Apr. 23, 2013, attached hereto as Exhibit G.

¹⁸ See Ex. A at ¶¶ 95, 97.

¹⁹ See Ex. A at ¶ 43; see also Ex. G at 90:2 - 24.

U.S. 817 (1997); *Berry v. Crown Equip. Corp.*, 108 F. Supp. 2d 743, 749-753 (E.D. Mich. 2000). Even an advanced degree in the general field of his testimony is not sufficient if the witness cannot show “specialized” knowledge, skill, experience, training, or education pertaining to the particular subject matter of his testimony. *Cicero v. Borg-Warner Auto, Inc.*, 163 F. Supp. 2d 743, 748 (E.D. Mich. 2001).

Kopstein describes himself as a “forensic chemical engineer.” His degree is simply in chemical engineering and the entirety of his work experience, prior to becoming a professional expert witness, is limited solely to chemical engineering.²⁰ Kopstein admitted that his title of “forensic chemical engineer” is self-bestowed, not the result of a degree or certification in the field.²¹ Importantly, Kopstein has never created or implemented an analytical method or standard for the analysis of hydrocarbon solutions, including mineral spirit solvents such as SK 105.²² Kopstein has no degree in analytical chemistry, he has never audited an analytical laboratory, and it has never been his job to evaluate laboratory standards like Method 9211 or laboratory practices in the field of analytical chemistry.²³ Kopstein has not identified any qualification beyond his career as an expert witness for plaintiffs in personal injury suits. “[E]xpert testimony prepared solely for purposes of litigation, as opposed to testimony flowing naturally from an expert’s

²⁰ See Ex. A at 3-7.

²¹ See Ex. G at p. 72:17 – 73:4.

²² *Id.* at 71:21-25.

²³ See Ex. G at 72:2-16.

line of scientific research or technical work, should be viewed with some caution” and suspicion. *Johnson v. Manitowoc Boom Trucks, Inc.*, 484 F.3d 426, 434 (6th Cir. 2007); *see also Mike’s Train House, Inc. v. Lionel, L.L.C.*, 472 F.3d 398, 408 (6th Cir. 2006).

Kopstein conducted no testing or experiments in preparation for this case. He has never analyzed SK 105 to determine its chemical content, he has never conducted testing to measure the accuracy or reliability of Method 9211, nor has he ever conducted testing on any petroleum product to determine chemical content.²⁴ Kopstein does not cite a single test or data point to demonstrate empirically that Method 9211 is unreliable or in any way deficient. Without any empirical evidence to demonstrate the accuracy or reliability of Method 9211, Kopstein’s opinions are improper and should be excluded. *See Mohney v. USA Hockey, Inc.*, 138 Fed.Appx. 804, 808-09 (6th Cir. 2005).

Similarly, Kopstein opines, without any basis in experience, training or other knowledge, that Safety-Kleen’s MSDS fail to list benzene in the ingredients section or otherwise provide some unspecified “benzene-specific health warnings and instructions for safe use.”²⁵ However, Kopstein has never created, nor has it ever been his job to create, a MSDS or warning label for any product or material.²⁶

²⁴ *Id.* at 56:11- 57:7.

²⁵ *See* Ex. A at ¶ 122.

²⁶ *See* Ex. G at 61:6-14.

He admits that he is neither an expert in industrial hygiene nor human factors.²⁷

He is not a certified industrial hygienist; nor does he hold any degrees or other certifications in industrial hygiene or human factors.²⁸ He is woefully unqualified to opine about Safety-Kleen's product labels, warnings and MSDS.

Kopstein's virtually non-existent level of familiarity with either of these topics is grossly insufficient to support Plaintiff's liability theory in this case. *Lippe v. Bairnco*, 288 B.R. 678, 689 (S.D.N.Y. 2003) (expert not qualified under *Daubert* to render valuation opinion when, despite academic credentials, witness never performed valuation). Simply put, his proposed testimony is that of an "oath helper[], in that [he] lend[s] [his] credentials and reputations to the party who calls [him] without bringing much if any relevant knowledge to bear on the facts actually at issue." *In re Rezulin Prods. Liab. Litig.*, 309 F. Supp. 2d 531, 538 (S.D.N.Y. 2004). Given his lack of experience and qualifications in the fields in which he proffers opinions, this Court should exclude his opinions at trial.

B. Kopstein ignores all relevant benzene testing of SK 105 and instead substitutes outdated and irrelevant data related to other products.

Kopstein selectively decided which data to consider for benzene content and,

²⁷ *Id.* at 59:14-16; 61: 21-62:14.

²⁸ *Id.* at 61:15- 62:14. Of note, Plaintiff's failure to warn claims fail because, as a result of the foregoing, she lacks expert evidence that Safety-Kleen breached a duty to warn or a causal connection between the warnings and Hendrian's injury. As the content and adequacy of warning labels on a parts washing machine is not in the common understanding of the typical lay juror, Plaintiff must offer expert testimony to establish that the warnings Safety-Kleen provided were insufficient. *See, Lawrenchuk v. Riverside Arena, Inc.*, 214 Mich.App. 431, 435, 542 N.W.2d 612 (1995) (finding expert testimony is required to establish design defect where "a jury would be denied an objective framework by which to evaluate plaintiff's claim, thus precluding any genuine determination whether the design was unreasonable"). The warnings at issue are based upon a multitude of factors including complex state and federal regulations, which are not commonly in the purview of lay persons.

in so doing, completely ignored a proper application of the scientific method. Kopstein relies on outdated literature related to a broad category of mineral spirits—and, notably, not a single reference to SK 105. On the surface, he points to his own publications, which he claims cite to “numerous published sources” that report “regular mineral spirits typically contains 1,000 ppm benzene.”²⁹ In reality, those citations are general references to mineral spirits, all based upon outdated data gathered *prior to 1980 and without reference to the analytical methods used to determine the benzene content of the solvents tested*. Moreover, all of his sources are secondary; tracing the references to the primary source reveals that all of his citations refer to a 1975 paper by Carpenter et. al, in which the authors reported a benzene level of 0.1% (1,000 ppm) in Stoddard solvent in what was described as a sample “typical of commercial production in the United States.”³⁰ The Carpenter study provides the sole basis for Kopstein’s arbitrary assessment of the benzene content of mineral spirits and, from this, he makes a wholly unsupported leap to conclude that SK 105 also contained 1,000 ppm benzene,³¹ at a time almost twenty

²⁹ See Ex. A at ¶ 79.

³⁰ See Carpenter, C.P., E.R. Kinkead, D.L. Geary, et al: *Petroleum hydrocarbon toxicity studies III. Animal and human responses to vapors of Stoddard solvent*. Toxicol. App. Pharm. 32:282-297 at 283 (1975), attached as Exhibit H, p 283.

³¹ Of note, Kopstein’s selection of a 1,000 ppm benzene content value is no coincidence. OSHA’s hazard communication standard does not require that benzene be listed on a product’s Material Safety Data Sheet if the product contains less than 0.1% (or 1,000 ppm) benzene or if it is not likely to be released into the workplace at concentrations that would exceed OSHA’s permissible exposure limit or present a health hazard at those concentrations. 29 CFR § 1910.1200(g)(2)(i)(C)(2). OSHA concluded that 1,000 ppm is the appropriate action level because it gives “a high degree of confidence” that resulting airborne concentrations would be below the airborne action level. See Ex. C at 4-5. As the triggering value for regulatory listing requirements, Kopstein’s reliance on this value as the benzene content of SK 105 is a thinly-veiled attempt to confuse the jury regarding the applicability of OSHA’s HazCom Standard in this case.

years removed from the time of the Carpenter paper.

Federal courts have deemed improper any method that relies on data analyzing a different substance than the one at issue, particularly when relevant data is available. *See In re Propulsid Products Liability Litigation*, 261 F. Supp. 2d 603, 616 (E.D. La. 2003).³² In *Nelson v. Tennessee Gas Pipeline*, the Western District of Tennessee recognized that “[c]ourts have found that extrapolation from studies of chemicals different from those at issue does not rise to the level of accepted methodology.” No. 95-1112, 1998 WL 1297690 at *7 (W.D. Tenn. Aug. 31, 1998) *aff’d*, 243 F.3d 244 (6th Cir. 2001); *see also Downs v. Perstorp Components, Inc.*, 126 F. Supp. 2d 1090, 1097 (E.D. Tenn. 1999). Kopstein seeks to do exactly what these courts have prohibited and apply data related to solvents other than SK 105 without offering any evidence of its applicability to SK 105. His opinions should be similarly excluded, especially in light of the fact that he has made no effort to verify his opinions or to reconcile them with relevant, contemporary data for SK 105, either generated by Safety-Kleen or other sources.

1. Kopstein’s opinions do not consider any data specific to SK 105.

Again, Safety-Kleen’s data demonstrates the approximate benzene content of SK 105 provided to Hendrian’s workplace was 15.7 ppm to 19 ppm, depending

³² The Eastern District of Louisiana examined this very issue in *In re Propulsid*, wherein the plaintiff’s experts ignored data and studies involving the actual drug at issue and instead tried to establish causation by looking at studies involving similar drugs. *In re Propulsid*, 261 F. Supp. at 616. The Court concluded that the experts “fail[ed] to show that [drug at issue] is so similar in chemical structure to those [other] drugs as to produce the same result” and “[s]ound scientific method does not support an extrapolation from one substance to another without some showing of identity or at least close similarity.” *Id.*

on the timeframe at issue.³³ In other words, real-world data specific to the material at issue in this case indicates benzene content approximately fifty (50) times lower than that suggested by Kopstein for other materials dating back to the 1970s.

The contradictory nature of Kopstein's opinions highlights the impropriety of his methodology in arriving at his benzene value. He acknowledges that "[t]he benzene content in a petrochemical product is its most important property relative to benzene exposure."³⁴ He has also admitted that "every mineral spirits' mixture is different," that the benzene content of mineral spirits varies batch to batch by vendor and that different vendors can produce mineral spirits with different benzene contents based upon the source of the crude oil or upon the processing.³⁵

Despite the foregoing, he admitted that he doesn't know which supplier might have provided mineral spirits to Safety-Kleen for the Detroit area during the relevant time period, nor does he know which Safety-Kleen Recycling Center would have provided SK 105 to customers in the Detroit area during that time.³⁶

Thus, not only does Kopstein intentionally ignore every test conducted on the 105 Solvent for benzene content, proclaiming invalid testing methodologies, but he also neglected to undertake any investigation himself having to do with the chemical composition of the solvent. Without analysis of the empirical data, there is no "fit" between the facts of this case and the opinions to which Kopstein

³³ See Ex. B at 3; *see also* Ex. F at 2; *see also* Ex. C at 3.

³⁴ See Ex. A at ¶ 67.

³⁵ See Ex. E at 84:3-16; 239:3-11.

³⁶ See Ex. E at 84:21-85:10.

proposes to testify. *See Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 144-47 (1997) (upholding trial court's exclusion of expert testimony based on studies totally dissimilar to the facts of the case). Mathematical calculations, even if based in part on reliable scientific method, should still be tested in real world by the expert; must be supported by peer reviewed, published sources; must still express an opinion that is generally accepted in the scientific community; and must not be based upon suspect assumptions. *Mohney*, 138 Fed.Appx. at 808-09.

2. Kopstein relies solely on irrelevant and outdated data regarding materials other than SK 105.

Seemingly in an effort to bolster his exaggerated benzene content assumptions and resulting exposure calculations, Kopstein claims mineral spirits have remained largely unchanged for roughly four decades: "The process for manufacturing mineral spirits is unchanged since the [sic] 1975 according to Paustenbach, et al and since the early 1970s according to Exxon. Therefore the chemical properties of mineral spirits – including benzene content – are unchanged since 1975."³⁷

Both SK 105 testing and extensive documentation in contemporary, published literature regarding mineral spirits in general, including submissions to OSHA during its final rulemaking on benzene, indicate that the benzene content of most commercial petroleum-derived solvents has been less than 1,000 ppm since at

³⁷ See Ex. A at ¶ 78.

least the late 1970s or early 1980s.³⁸ Moreover, among the sources cited in his publications, Kopstein cites to the International Agency for Research on Cancer's ("IARC"), the specialized cancer agency of the World Health Organization, 1989 Monograph. Ironically, the Monograph acknowledges that pre-1980 data on the benzene content of petroleum solvents has no relevance to today's products. IARC, in fact, noted a "pronounced move" over the preceding twenty to thirty years toward the use of refining practices which substantially reduced the benzene content of many solvents to trace levels.³⁹ Tellingly, Kopstein does not address this in his report.

Kopstein's benzene content opinions in this case are even more dubious in light of his testimony from prior cases. In fact, he has previously testified under oath that the benzene content of solvents has decreased over time – there was a "drop off" by 1986 and "another drop-off after about 1990 or 1991."⁴⁰ In that same deposition, Kopstein further testified that, based upon his experience, the data and his "knowledge that the pattern of benzene concentrations in industrial solvents, in petroleum-based solvents was dropping," typical vendor's mineral

³⁸ See Williams, P.R.D., Panko, J.M., Unice, K., Brown, J.L., and D.J. Paustenbach (2008) *Occupational exposures associated with petroleum-derived products containing trace levels of benzene* ("Williams 2008"). J. Occup. Environ. Hyg. 5:565-574, attached as Exhibit J; see also Andrew Jaques, *Letters to the Editor: Benzene Levels in Hydrocarbon Solvents*, Vol. 3, J. OCC. AND ENVT'L HYG. No 9, D85-D90, Sept. 2006, attached as Exhibit K; see also Richard H. McKee, et al, *Letter to the Editor – Benzene Levels in Hydrocarbon Solvents – Response to Author's Reply*, Vol. 4 J. OCC. ENVT'L HYG. at D60-D62 (2007), attached as Exhibit K.

³⁹ See IARC Monograph, Ex. E at 48.

⁴⁰ See Melvyn Kopstein Dep., *Edwards v. Safety-Kleen Corp.*, Case No. 97-7180-CIV, 80:22-81:9, Jan. 5, 1999, attached hereto as Exhibit M. Notably, each of these "drop-offs" pre-dates Hendrian's use of SK 105, beginning in May 1991. Ex. A at ¶25.

spirits would have contained 300 to 400 ppm in 1986 and would have declined below that amount over time.⁴¹ Most importantly, Kopstein not only acknowledged the levels of benzene in SK 105 averaged 35 to 40 ppm *during the relevant time period*, but he also admitted that they are consistent with “the diminution of the benzene in [similar] types of products.”⁴² The foregoing testimony and benzene values discussed therein are a far cry from the 1,000 ppm benzene content value he attempts to insert into the present case.

3. Kopstein’s sources don’t disclose the analytical methods used.

Kopstein obsessively references his reliance on “published sources” for mineral spirits’ benzene content, discrediting Safety-Kleen’s “unpublished” testing methods for the exact solvent at issue: “As noted, in assessing Mr. Hendrian’s past exposure to benzene arising from his use of SK-105, I utilized published sources reporting the benzene content of mineral spirits – rather than unpublished claims arising from a flawed analytical procedure such as SK9211.”⁴³ Ironically, beyond the fact that his “published sources” represent outdated information, they also fail to identify the analytical methods used to test for benzene and thus cannot be appropriately verified. For example, the Carpenter paper—the basis for Kopstein’s benzene content claims—does not provide a detailed description of the test sample analysis for determining benzene content. Without such information, even

⁴¹ See Ex. M at 85:18 – 88:3.

⁴² *Id.* at 90:19 – 91:5.

⁴³ See Ex. A at ¶ 82.

according to Kopstein's own admitted dictates applicable to analytical methods, the accuracy of the benzene content estimates cannot be determined. This is especially true given his antiquated data because the identification and quantification of certain compounds, such as benzene, has historically been subject to interference and false positives.⁴⁴ Other chemicals in the solvent have physical or chemical properties that can make speciation difficult unless appropriate scientific methods are used. These analytical challenges have long been recognized and the appropriate methods necessary for adequate speciation and quantification of aromatic hydrocarbons like benzene have evolved over time.⁴⁵ Kopstein, fails to address this evolution.

C. Kopstein uses a flawed exposure model and fails to validate his findings by comparison to any other data.

Not only are Kopstein's calculations based upon inaccurate and unverifiable data, but his exposure calculation methodology is fundamentally flawed on numerous levels. According to his report and deposition testimony, Kopstein applied the methodology from his published article in "estimating" Hendrian's alleged exposures to benzene from his claimed use of SK 105. His "methodology," in reality, is the application of an oversimplified and arbitrary ratio between benzene in hydrocarbon solutions and airborne emissions as reported in a

⁴⁴ See May 22, 2013 Supplemental Report of Anne O'Donnell, attached hereto as Exhibit N, at pp. 3-4.

⁴⁵ See Ex. J, Williams 2008 at 565; see also Ex. B at 7-8.

single exposure simulation published by Fedoruk, *et al.* (“Fedoruk simulation”),⁴⁶ without consideration of the many factors necessary in calculating past benzene exposures in specific circumstances.

Kopstein presents no data supporting his characterization of the artificial exposure simulation presented in the Fedoruk simulation as a “model” for reconstructing past benzene exposures in this case or for determining whether benzene content must be disclosed on MSDS for SK 105. Nor does the simulation refer to any data showing that this model has been “validated.” Kopstein recognizes that exposure modeling requires the identification and quantitation of all the conditions that contribute significantly to exposures, yet he has done nothing of the sort with regard to his application of the Fedoruk simulation to the alleged exposures in this case.

1. Kopstein’s “methodology” ignores all available empirical exposure data specific to the machine and solvent at issue.

Air monitoring for determination of employee exposures is presently the

⁴⁶ See Fedoruk, M.J., R. Bronstein, and B.D. Kerger: *Benzene exposure assessment for use of a mineral spirits-based degreaser*. Appl. Occup. Environ. Hyg. 18:764-771 (2003), attached as Exhibit O. The Fedoruk simulation considered whether worker benzene exposures could exceed regulatory airborne exposure limits using SK 105 *spiked with additional pure benzene* in a larger vat-style parts-washing machine and under aggressive study conditions. *Id.* The simulation involved what the investigators called a “relatively vigorous” use of the work station, creating conditions that “were considered to represent upper bound benzene emissions and maximal worker exposures relevant to standard uses.” *Id.* at 771. Even under those conditions, airborne occupational exposure limits were not exceeded. *Id.* All of the measured airborne concentrations of benzene in the Fedoruk simulation are conservative (*i.e.*, likely to over-estimate benzene exposures) because they are based on an aggressive protocol of parts washer use. Moreover, the simulation identifies a significant number of factors contributing to the exposures at the specific parts washer involved in the study, including the exact configuration of the machine itself, which is a rectangular structure with a solvent reservoir storing approximately thirty (30) gallons of solvent. *Id.* at 765. The device used in the Fedoruk simulation is very different in size, volume and other features that impact benzene emissions from the “sink on a drum” style device Hendrian used in the ATNPC. *Id.* at 766; *see also, e.g.*, Ex. C at p. 3; David Doak Dep. 50:2-10, Oct. 12, 2012, attached hereto as Exhibit P; Daniel Doak Dep. 95:8-20, 96:4-11, Oct. 11, 2012, attached hereto as Exhibit Q.

only method accepted by OSHA, NIOSH or the ACGIH for evaluating and comparing exposures with occupation health standards and is the primary means for industrial hygienists to evaluate an individual's exposure.⁴⁷ Kopstein ignored numerous air monitoring studies regarding the sink-on-a-drum parts washer at issue and SK 105. These include both internal and third-party exposure evaluations beginning in the late 1980s and including Health Hazard Evaluations performed by NIOSH, a several-month study conducted by National Medical Advisory Services, Inc. ("NMAS"), and several published studies over the next thirty years.⁴⁸ Thus, just as Kopstein conveniently disregards applicable benzene content data for SK 105, he also ignores exposure data for the relevant parts washing machine.⁴⁹

Evidentiary reliability is not present when the opinion is premised upon fundamentally unsound bases or a fatally deficient amount of data. *Moore v. Ashland Chem., Inc.*, 151 F.3d 269, 278-79 (5th Cir. 1998); *see also Attorney General of Okla. v. Tyson Foods, Inc.*, 565 F.3d 769, 781 (10th Cir. 2009) (holding that, an expert has to make discretionary decisions about what data to enter into his calculations, and where the discretionary decisions had not been tested or peer reviewed, his analysis was unreliable and properly excluded). To establish reliability under *Daubert*, an expert bears the burden of furnishing some objective,

⁴⁷ See May 21, 2013 Supplemental Report of John Spencer, attached hereto as Exhibit R, at 4.

⁴⁸ See Ex. C at 6-10.

⁴⁹ See Ex. C at 6-7. These studies are all set forth in detail on pages 6 through 10 of Mr. Spencer's report.

independent validation of his methodology, *Daubert*, 509 U.S. at 592-93; *see also Kumho Tire*, 526 U.S. at 151-52; *Meemic Ins. Co. v. Hewlett-Packard Co.*, 717 F. Supp. 2d 752, 762 (E.D. Mich. 2010).⁵⁰

Kopstein’s opinions are founded on unreliable data which was not gathered in a scientific way. *Daubert*, 509 U.S. at 590 (“explaining that the adjective “scientific” implies a grounding in methods and procedures of science, “knowledge” connotes more than a subjective belief or unsupported speculation, and, in order for an inference or assertion to qualify as “scientific knowledge,” it must be derived by the scientific method). Indeed, he assumes the benzene content of SK 105, performs calculations based up selected data within a single simulation and wholly fails to validate his calculations by comparison to any other data, including that from the relevant time and pertaining to the relevant machine at issue. Opinions based on speculative information regarding exposure levels cannot be admissible. *Castellow v. Chevron USA*, 97 F. Supp. 2d 780, 797 (S.D. Tex. 2000).⁵¹

⁵⁰ District courts are tasked with the function of ensuring that the opinions proffered by experts do not cross the line between scientific knowledge and mere advocacy. Courts properly preclude expert testimony “that is connected to existing data only by the *ipse dixit* of the expert.” *Nelson v. Tennessee Gas Pipeline Co.*, 243 F.3d 244, 254 (6th Cir. 2001). *Daubert* and its progeny teach that the reliability of expert testimony can be judged by such factors as whether the expert’s theory or technique can be tested, whether it has been subject to peer review and whether the methodology utilized by the expert is generally accepted in the field. *Daubert*, 509 U.S. at 593-94; *Clay v. Ford Motor Co.*, 215 F.3d 663, 667 (6th Cir. 2000).

⁵¹ As the *Castellow* Court explained: After a thorough review of all of the testimony, exhibits, and supplements, the court is led to the inescapable conclusion that the opinions from the expert witnesses in this case are unreasonably dependent on speculation about the cause of [Plaintiff’s] AML. The court finds further that [Plaintiff’s expert’s] exposure assessment is not based on adequate data, but instead was devised to support a causation opinion without reliable bases to do so. His methodology, therefore, is not reliable and his testimony is inadmissible. **In the absence of sufficient, accurate information of exposure levels, his opinion is nothing more than speculation. Such result-driven procedures are anathema to both science and law**

Thus, Kopstein's bald assertion that the arbitrary ratio he took from a simulation involving (1) a very different machine and (2) under completely irrelevant conditions can be applied to Hendrian's alleged exposures herein, without any basis in science or validation of the ratio's application in other exposure scenarios, is simply is not enough to demonstrate reliable methodology.

2. Kopstein's *ipse dixit* has been previously excluded because his unreliable exposure assessment lacks either validation or general acceptance in the scientific community.

Kopstein's "end-justifies-the-means" approach to expert testimony has been rejected previously. The United States District Court for the Southern District of Florida, in *Edwards v. Safety-Kleen Corporation*, took issue with Kopstein's "methodology" in another case involving SK 105, finding that Kopstein's "applications ignore[d] basic science principles and, as such, [were] not based on sound science."⁵²

The Eleventh Circuit rejected a similarly unreliable method in *Firestone v.*

and are properly excluded because they are too speculative to assist the triers of fact in determining the cause of [Plaintiff's] illness. In addition, the court finds that the other expert witnesses, eminently qualified as each is in his own field, depend on [these same] exposure level calculations to provide the causal link to Defendants' products. **That causal link fails.** *Castellow v. Chevron USA*, 97 F. Supp. 2d 780, 797 (S.D. Tex. 2000) (emphasis added).

⁵² *Edwards v. Safety-Kleen Corp.*, 61 F. Supp. 2d 1354, 1358 (S.D. Fla. 1999), attached hereto as Exhibit S. The *Edwards* Court rebuffed Kopstein's attempts at "self-acclamation" of his own methodologies, noting that "nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert." *Id.* at 1357. Specifically, the Court took issue with the assumptions Kopstein made, the data he relied upon in applying his "textbook models" to the facts of the case, and his "intermingling of well-established formulae in order to reach a particular conclusion." *Id.* Moreover, the Court found no indication in the record that Kopstein's approach of applying his "formula or combination of formulae" was in fact followed by other experts in the industry; nor were there any references to articles or papers that validated his approach of applying the formula to the exposures at issue in that particular case. *Id.* at 1358. Noting that it is the plaintiff's burden to prove the reliability of the proffered testimony, and finding that the plaintiff therein failed to do so, the Court excluded Kopstein's testimony. *Id.*

Fla. Power & Light Co., wherein it affirmed the trial court's rejection of an expert witness in a radiation exposure case because the inputs of the expert's calculations were "unsupported leaps of faith." *Firestone v. Fla. Power & Light Co.*, 272 Fed. Appx. 761, 768 (11th Cir. 2008).⁵³ Similarly, in *Allen v. Pa. Eng'g Corp.*, the Fifth Circuit affirmed the exclusion of expert testimony because the expert's opinion relied principally on the affidavit of a plaintiff's co-worker and extrapolations concerning chemical handling based on standards in the industry at the time. *Allen v. Pa. Eng'g Corp.*, 102 F.3d 194, 198-99 (5th Cir. 1996). The *Allen* Court found the experts background information concerning the level of exposure "so sadly lacking as to be mere guesswork." *Id.*

Kopstein's calculations herein are equally lacking in scientifically acceptable supporting data and his testimony amounts to nothing more than an ad hoc and subjective review of self-selected and mostly irrelevant data presented in the light most favorable to Plaintiff's purported case. In the absence of any objective economic or historical analysis, and without a scientifically-valid and independent real-world assessment of Hendrian's alleged exposure, Kopstein's opinions are undeniably inadmissible. *See Freeport-McMoran Res. Partners Ltd. P'ship*, 56 F. Supp. 2d 823, 834-35 (E.D. Mich. 1999).

⁵³ In *Firestone*, the experts calculated the radiation dose levels based on unproven or unrelated data. *Id.* Thus, the Court held that, as the calculations were based on unreliable data, the experts' testimony was properly excluded. *Firestone*, 272 Fed.Appx. at 768.

D. Kopstein's allegations regarding materials submitted to Ford are based upon speculation and conjecture.

Kopstein also claims Safety-Kleen violated Ford policies regarding product information, claiming that Safety-Kleen failed to disclose the presence of benzene in SK 105 during Ford's product approval process.⁵⁴ Kopstein admits he doesn't know what information may have provided to Ford.⁵⁵ In fact, Ford was unable to produce the materials Safety-Kleen submitted when SK 105 was approved for use so the record is silent on this issue.⁵⁶ Expert opinions that are based on subjective beliefs, speculative assumptions or are unsupported by the record are inadmissible. *See, General Elec. Co.*, 522 U.S. at 146 (1997); *McLean v. 988011 Ontario, Ltd.*, 224 F.3d 797, 800 (6th Cir. 2000). Accordingly, Kopstein's opinions should be precluded at trial.

CONCLUSION

Kopstein lacks the experience or qualifications necessary to render opinions regarding Safety-Kleen's product warnings and analytical testing method. He has

⁵⁴ See Ex. A, p. 39. This opinion is yet another example of Kopstein serving as an advocate for Plaintiff rather than providing any specialized knowledge that would assist the trier of fact to understand the evidence or to determine a fact in issue. Fed. R. Civ. P. 702. The jury is not aided by expert testimony that does little more than package the evidence in a preview of Plaintiff's counsel closing argument and, as such, the foregoing testimony is an improper expert opinion. *In re Rezulin*, 309 F. Supp. 2d at 538 (criticizing use of experts "whose intended role is more to argue the client's cause from the witness stand than to bring to the fact-finder specialized knowledge or expertise that would be helpful in resolving the issues of fact").

⁵⁵ See Ex G, p. 229:17 – 230: 8.

⁵⁶ Dave Hands, CIH testified at length regarding the toxicology review Ford performs before a chemical is approved for use in Ford's facilities. See 30(b)(6) David Hands Depo. 66:22 –68:7, Jan. 13, 2012, attached hereto as Exhibit T. Ford even provided a form to chemical manufacturers, requesting specific chemical property and identification information; it also obtained a Material Safety Data Sheet ("MSDS") with pertinent chemical data from the manufacturer. *Id.* at 68:12 – 71:11. If the information received was insufficient, Ford's toxicologists would request any additional information necessary to conduct the toxicological review. *Id.* at 71:4-11. Ford was unable to produce these toxicology materials. See Ford's Response to Plaintiff's Request to Produce, attached as Exhibit U, at Responses to Requests 3, 4, 5, 8 and 11.

disregarded important evidence and failed validate his calculations with scientifically-reliable, real-world testing of SK 105 and the parts-washing machine at issue. Kopstein's opinions fail to meet the most basic reliability and relevance standards for expert testimony under the Federal Rules of Evidence and *Daubert*, and Safety-Kleen respectfully requests that, after a hearing and thorough examination of these issues, this Court grant Safety-Kleen's motion *in limine* and preclude any testimony and reports regarding Kopstein's opinions, including any mention or reference thereto, at the trial of this matter.

Respectfully submitted,

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**ATTORNEYS FOR DEFENDANT
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Date: October 28, 2013

CERTIFICATE OF SERVICE

I hereby certify that on October 28, 2013 I electronically filed the foregoing paper with the Clerk of the Court using the Court's ECF system, which will send notification of such filing to all ECF participants of record:

JONES CARR M^cGOLDRICK, L.L.P.

/s/ Wesley S. Alost

Wesley S. Alost